

Appendix A: Validation Test Plots

Test Laboratory: Kyocera-Wireless Corp.

Validation @ 20dBm 1900Mhz Probe 1664, DAE 493, Dipole 5d003

Communication System: CW, Frequency: 1900 MHz, Duty Cycle: 1:1

Medium: HSL1800,Medium parameters used (interpolated): f = 1900 MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 38.9$; $\rho = 1000$ kg/m³

Phantom: SAM 12,Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1664, ConvF(5.05, 5.05, 5.05), Calibrated: 6/22/2006

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sn493,Calibrated: 11/7/2006

Measurement SW: DASY4, V4.7 Build 53

Postprocessing SW: SEMCAD, V1.8 Build 160

Temperature:

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

1900MHz Validation @20dBm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

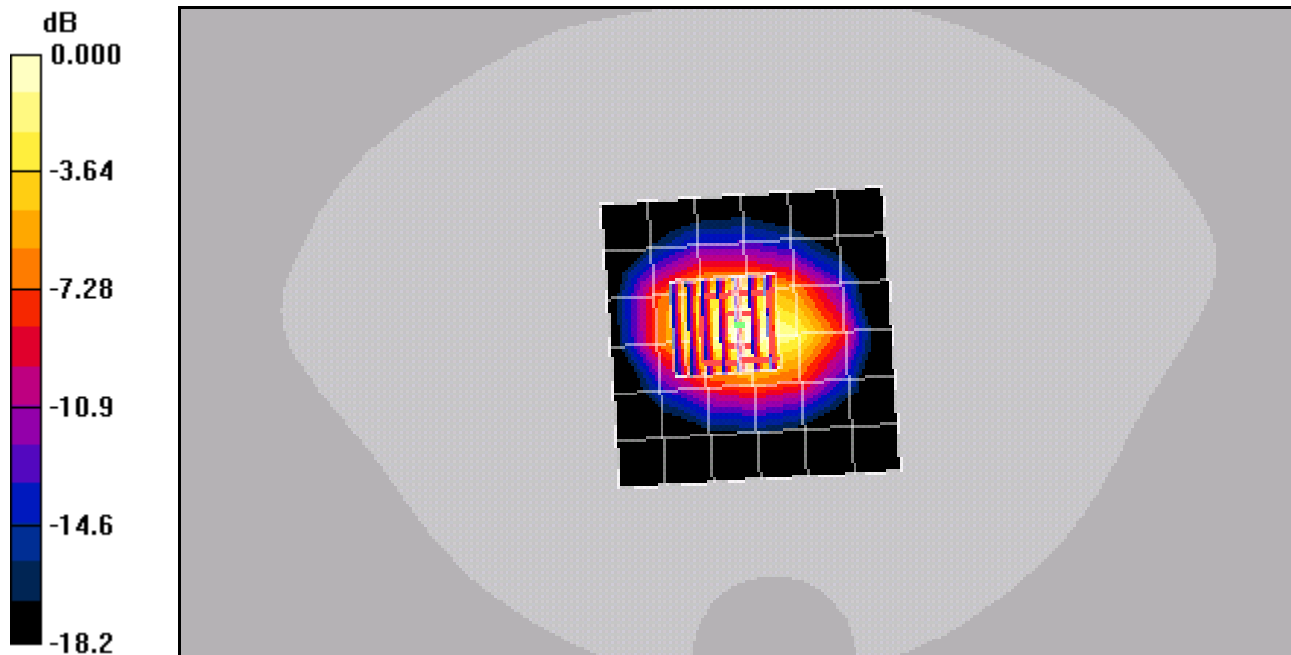
Reference Value = 58.3 V/m; Power Drift = -0.073 dB

Peak SAR (extrapolated) = 6.83 W/kg

SAR(1 g) = 3.96 mW/g; SAR(10 g) = 2.09 mW/g

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 4.42 mW/g



Test Laboratory: Kyocera-Wireless Corp.

Validation @ 20dBm 835Mhz Probe 1664, DAE 493, Dipole 454

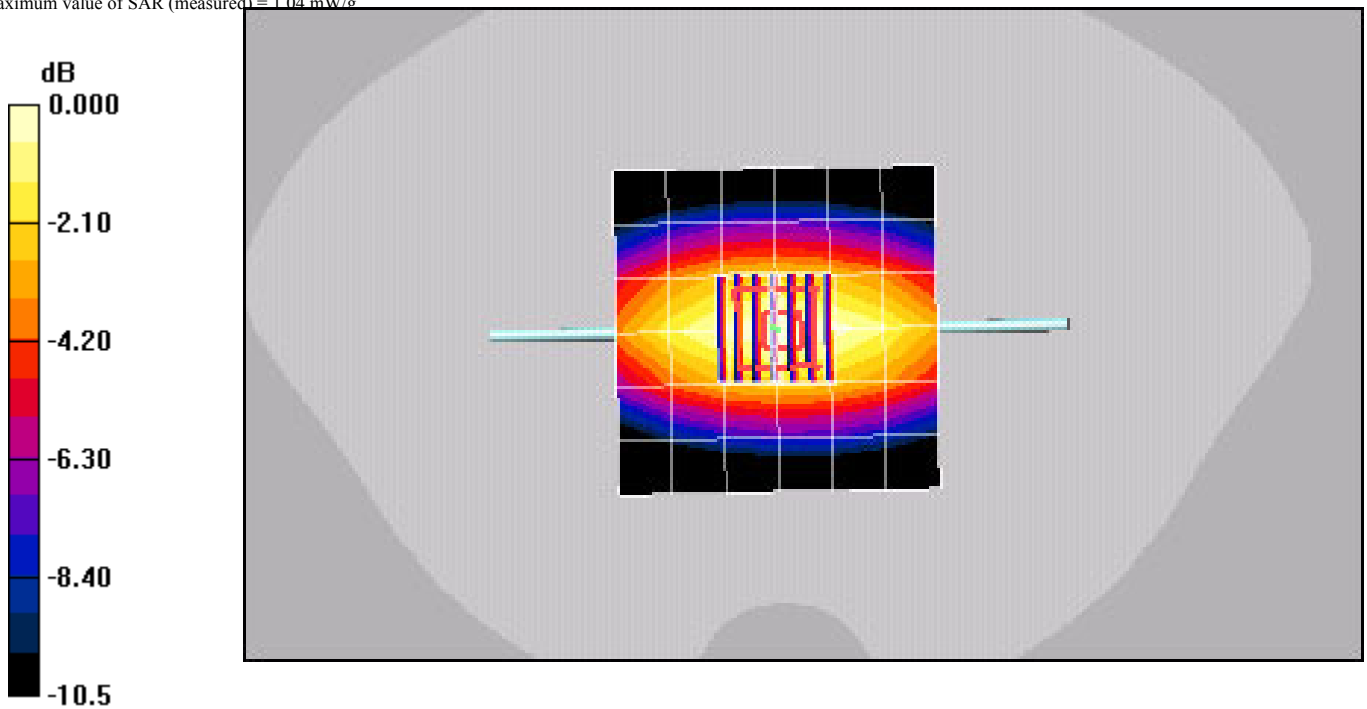
Communication System: CW, Frequency: 835 MHz, Duty Cycle: 1:1
 Medium: HSL900, Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.93 \text{ mho/m}$; $\epsilon_r = 41.4$; $\rho = 1000 \text{ kg/m}^3$
 Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:
 Probe: ET3DV6 - SN1664, ConvF(6.58, 6.58, 6.58), Calibrated: 6/22/2006
 Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),
 Electronics: DAE3 Sn493, Calibrated: 11/7/2006
 Measurement SW: DASY4, V4.7 Build 53
 Postprocessing SW: SEMCAD, V1.8 Build 160

Temperature:
 Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

835MHz Validation @20dBm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 35.0 V/m; Power Drift = 0.015 dB
 Peak SAR (extrapolated) = 1.32 W/kg
SAR(1 g) = 0.959 mW/g; SAR(10 g) = 0.632 mW/g
 Maximum value of SAR (measured) = 1.04 mW/g



0 dB = 1.04mW/g

Test Laboratory: Kyocera-Wireless Corp.

Validation @ 20dBm 1900Mhz Probe 1664, DAE 493, Dipole 5d003

Communication System: CW, Frequency: 1900 MHz, Duty Cycle: 1:1

Medium: HSL1800,Medium parameters used (interpolated): $f = 1900$ MHz; $\sigma = 1.35$ mho/m; $\epsilon_r = 38.2$; $\rho = 1000$ kg/m³

Phantom: SAM 12,Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1664, ConvF(5.05, 5.05, 5.05), Calibrated: 6/22/2006

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sn493,Calibrated: 11/7/2006

Measurement SW: DASY4, V4.7 Build 53

Postprocessing SW: SEMCAD, V1.8 Build 160

Temperature:

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

1900MHz Validation @20dBm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

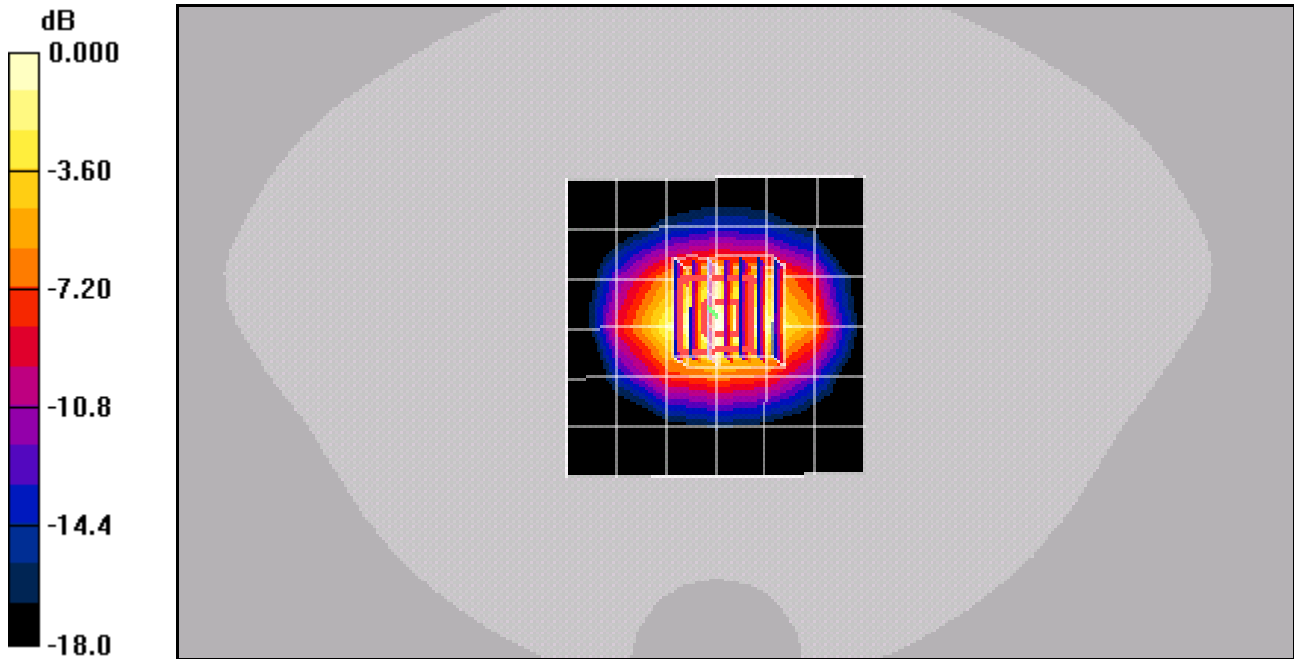
Reference Value = 58.9 V/m; Power Drift = 0.015 dB

Peak SAR (extrapolated) = 6.71 W/kg

SAR(1 g) = 3.87 mW/g; SAR(10 g) = 2.06 mW/g

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 4.34 mW/g



0 dB = 4.34mW/g

Test Laboratory: Kyocera-Wireless Corp.

Validation @ 20dBm 835Mhz Probe 1664, DAE 493, Dipole 454

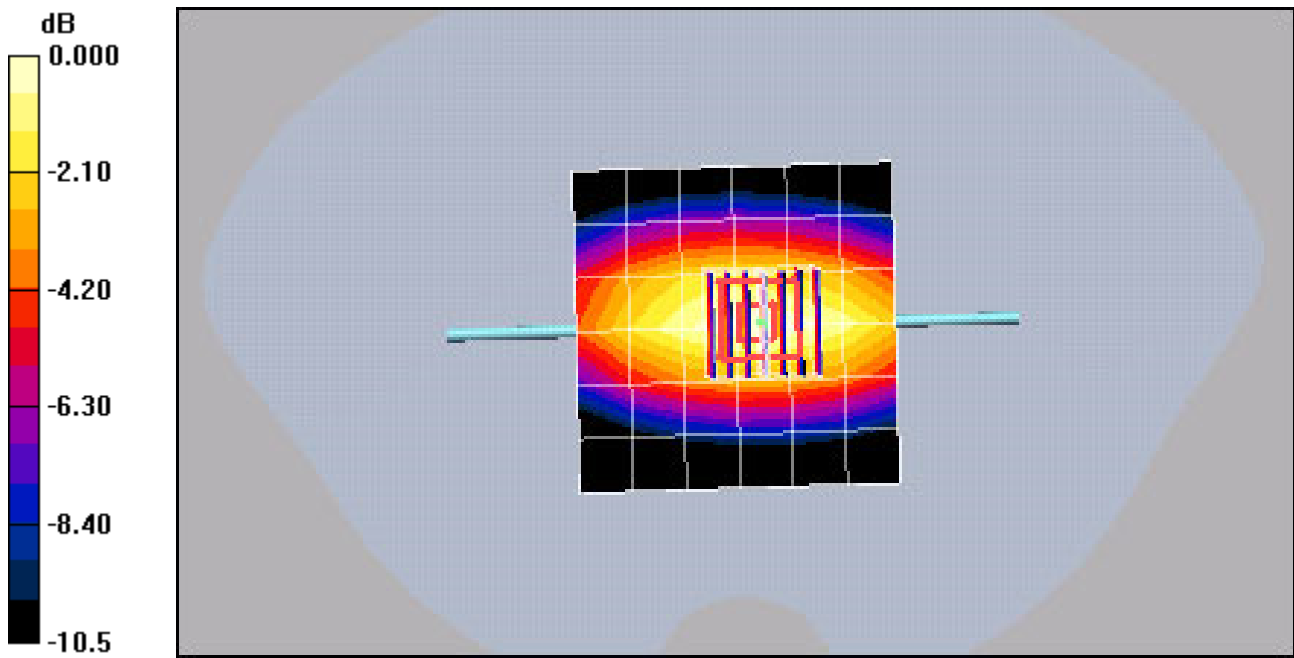
Communication System: CW, Frequency: 835 MHz, Duty Cycle: 1:1
 Medium: HSL900, Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.91 \text{ mho/m}$; $\epsilon_r = 42$; $\rho = 1000 \text{ kg/m}^3$
 Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:
 Probe: ET3DV6 - SN1664, ConvF(6.58, 6.58, 6.58), Calibrated: 6/22/2006
 Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),
 Electronics: DAE3 Sn493, Calibrated: 11/7/2006
 Measurement SW: DASY4, V4.7 Build 53
 Postprocessing SW: SEMCAD, V1.8 Build 160

Temperature:
 Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

835MHz Validation @20dBm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 36.0 V/m; Power Drift = -0.048 dB
 Peak SAR (extrapolated) = 1.30 W/kg
SAR(1 g) = 0.929 mW/g; SAR(10 g) = 0.611 mW/g
 Maximum value of SAR (measured) = 1.02 mW/g



0 dB = 1.02mW/g

Test Laboratory: Kyocera-Wireless Corp.

Validation @ 20dBm 835Mhz Muscle Probe 1664, DAE 493, Dipole 454

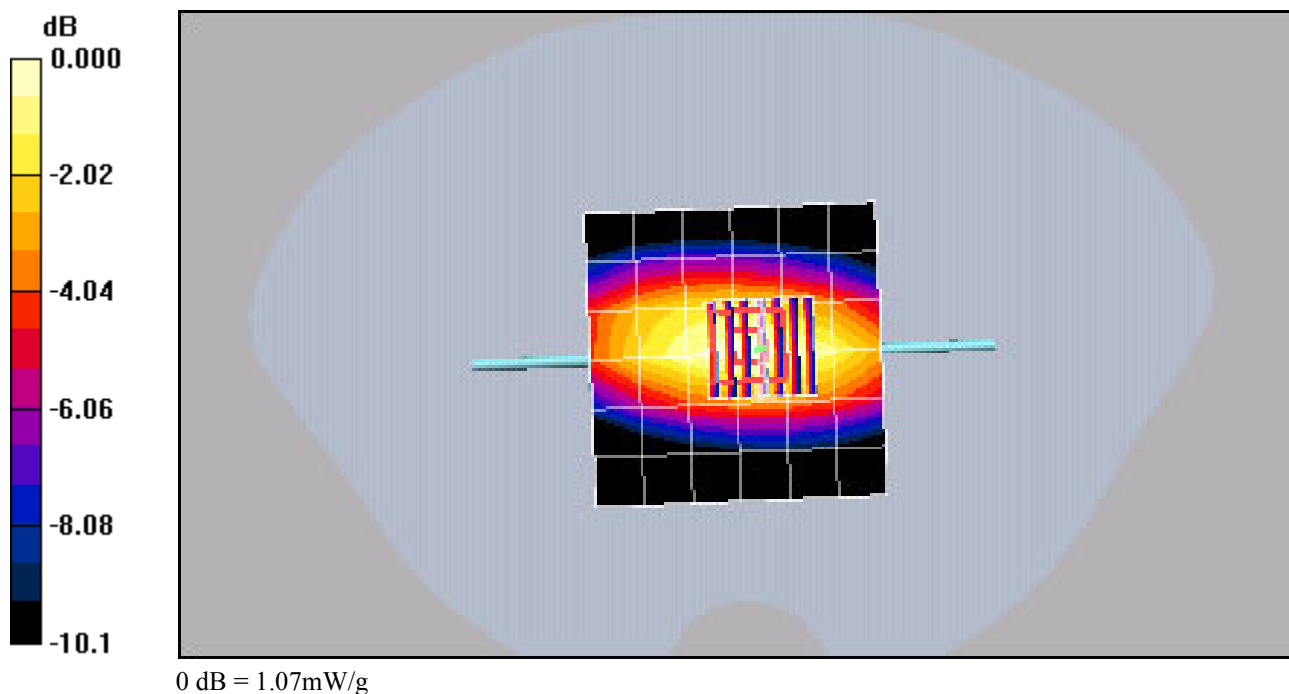
Communication System: CW, Frequency: 835 MHz, Duty Cycle: 1:1
 Medium: M900,Medium parameters used: f = 835 MHz; $\sigma = 0.934$ mho/m; $\epsilon_r = 54.3$; $\rho = 1000$ kg/m³
 Phantom: SAM 12,Phantom section: Flat Section

DASY4 Configuration:
 Probe: ET3DV6 - SN1664, ConvF(6.43, 6.43, 6.43), Calibrated: 6/22/2006
 Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),
 Electronics: DAE3 Sn493,Calibrated: 11/7/2006
 Measurement SW: DASY4, V4.7 Build 53
 Postprocessing SW: SEMCAD, V1.8 Build 160

Temperature:
 Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

835MHz Validation @20dBm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 34.8 V/m; Power Drift = -0.008 dB
 Peak SAR (extrapolated) = 1.38 W/kg
SAR(1 g) = 0.980 mW/g; SAR(10 g) = 0.649 mW/g
 Maximum value of SAR (measured) = 1.07 mW/g



Test Laboratory: Kyocera Wireless Corp.

Validation @ 20dBm 1900Mhz Muscle Probe 1664, DAE 493, Dipole 5d003

Communication System: CW, Frequency: 1900 MHz, Duty Cycle: 1:1

Medium: HSL1800,Medium parameters used (interpolated): $f = 1900$ MHz; $\sigma = 1.57$ mho/m; $\epsilon_r = 51.4$; $\rho = 1000$ kg/m³

Phantom: SAM 12,Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1664, ConvF(4.57, 4.57, 4.57), Calibrated: 6/22/2006

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sn493,Calibrated: 11/7/2006

Measurement SW: DASY4, V4.7 Build 53

Postprocessing SW: SEMCAD, V1.8 Build 160

Temperature:

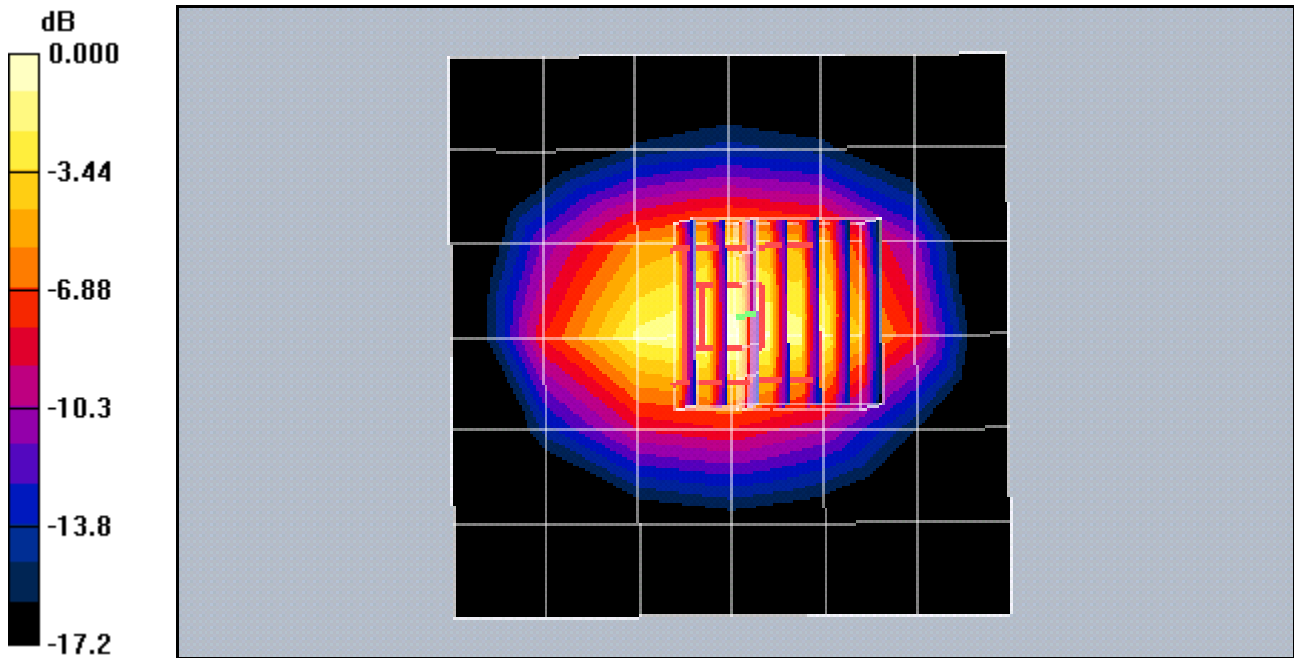
Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

1900MHz Validation @20dBm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 55.5 V/m; Power Drift = -0.004 dB

Peak SAR (extrapolated) = 6.86 W/kg

SAR(1 g) = 4.03 mW/g; SAR(10 g) = 2.16 mW/g



0 dB = 4.55mW/g